



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,800	03/09/2004	Nobushige Ichikawa	0388-043647	3160

28289 7590 11/02/2006

THE WEBB LAW FIRM, P.C.  
700 KOPPERS BUILDING  
436 SEVENTH AVENUE  
PITTSBURGH, PA 15219

EXAMINER

WILSON, GREGORY A

ART UNIT	PAPER NUMBER
----------	--------------

3749

DATE MAILED: 11/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/796,800	<b>Applicant(s)</b> ICHIKAWA ET AL.	
	<b>Examiner</b> Gregory A. Wilson	<b>Art Unit</b> 3749	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 August 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10, 12-14 and 16-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-10, 12-14, 16-19 and 22-24 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 20, 21, 25 and 26 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 26 recites the limitation "the rear window of the work-vehicle cabin" in line

3. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 2, 20 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Shuttleworth et al (6,780,097). Shuttleworth et al discloses a vehicle roof structure

for a cabin of a work vehicle and includes a roof unit (10) which is downwardly bulging, and is the forward region of the cabin (SEE Figures 1 & 4), a heater (26B), an evaporator (26A) arranged adjacent rearwardly of the heater (SEE Figure 4), a pair of forward air-supply openings (38) provided in the ceiling portion and disposed adjacently near the heater for allowing conditioned air to be fed into the cabin, the roof unit includes an inner roof portion (12) located on the inner side and an outer roof portion (14) located on the outer side, a lateral duct best shown by element (36) and cover (40) guide conditioned air into the cabin through aforementioned openings (38), Shuttleworth et al furthermore discloses an air supply (54) which is forward of a partition wall formed by the connection of elements (58, 60) creating separate ducts and positioned via eave portions enclosing a window portion (66) but also allowing flow of air to be heated becoming conditioned air to ultimately flow into the cabin via element (38) by the adjacent hole opening to element (38) (SEE Figure 4).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shuttleworth et al (6,780,097). Shuttleworth et al discloses the applicants primary inventive concept as stated above but does not particular recite the structural configuration of the heater to

the evaporator with respect to the rear window. It would have been an obvious matter of design choice to modify the teachings Shuttleworth et al by providing the heater (26B) and evaporator (26A) in reverse order to satisfy the applicants claimed invention, since the applicant has not disclosed that having a heater spaced from the rear window and the evaporator between the heater and the rear window solves any stated problem in a new or unexpected way or is for any particular purpose which is unobvious to one of ordinary skill.

#### ***Allowable Subject Matter***

Claim 3 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 4-10, 12-14, 16-19 and 22-24 are allowed.

#### ***Response to Arguments***

Examiner acknowledges the amendment to claim 23 and hereby withdraws the previously submitted objection. Claims 23 & 24 are now allowable. Applicant's arguments filed 8/29/06 as they pertain to Shuttleworth et al have been fully considered but they are not persuasive. Applicant argues that Shuttleworth moves the conditioned air rearwardly of the separation wall into the cabin through openings, whereas Applicants' claim 20 recites that the conditioned air is moved forwardly of the partition wall and into the cabin through a pair of forward air-supply openings. The examiner respectfully disagrees and directs applicants attention to Figure 4, where the heater and

evaporator have a connecting piece (60) which couples with element (58) to create a partition wall. The air which comes into contact with the heater arrangement (26A & 26B) will inherently flow into the cabin space via air-supply openings (38) by way of adjacent hole opening (unnumbered) which receives conditioned flow which is forward of the created partition wall. With regard to applicants arguments as they pertain to Claim 1, that the applicants evaporator and heater are positioned in an opposite relationship from the evaporator and heating core of Shuttleworth, the examiner respectfully disagrees. In the arguments, the applicant uses the subject matter of claim 25 as an example of what is taught in claim 1, but this is not positively recited in claim 1 and it is for this reason, claims 1 and 25 have separate rejections applied to them. The applicant has not presented arguments persuasive to the examiner to overcome the rejections applied under Shuttleworth et al.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

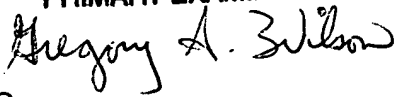
shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory A. Wilson whose telephone number is (571)272-4882. The examiner can normally be reached on 7 am - 4:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Josiah Cocks can be reached on (571) 272-4874. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**GREGORY WILSON  
PRIMARY EXAMINER**



Gaw  
October 26, 2006